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**THE FIRST NATIONAL SURVEY OF LOCAL
SCHOOL-TO-WORK PARTNERSHIPS:
DATA SUMMARY**

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The survey results described in this document reflect the efforts of many dedicated STW leaders. More than 800 local partnership coordinators took the time to collect the necessary data from their member institutions and to record that information on the survey questionnaire. They provided invaluable detail on implementation status and approaches, and on the numbers of students participating in various STW activities. These local staff were supported, encouraged, and sometimes prodded to complete the survey by their state STW directors and evaluation liaisons, whose assistance has been and remains critical to the conduct of the national evaluation. The high rate of response to the fall 1996 Local Partnership Survey is due largely to the commitment of these two groups of individuals.

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THE FIRST NATIONAL SURVEY OF LOCAL STW PARTNERSHIPS: DATA SUMMARY

Public attention has increasingly focused on the importance of preparing American youth for productive roles in society and the world economy. The School-to-Work Opportunities Act of 1994 (STWOA) promotes a broad strategy to help students develop the skills, knowledge, and habits they need to identify and fulfill their career goals.

This educational reform initiative builds on some elements of earlier school programs and school-business collaborations that served relatively small numbers of students. STWOA encourages instead broad and coordinated implementation of the STW model elements and the participation of all students in at least some of them. To build this comprehensive system of school-based and work-based learning, the federal legislation calls for partnerships at the state and local levels--involving educators, employers, labor organizations, and community groups--to define, implement, and oversee STW systems. STWOA grants awarded to local partnerships are intended to stimulate STW system development.

Documenting STW implementation nationwide is an important step in determining the extent to which the reforms promoted by STWOA are taking hold. In fall 1996, as part of the national Evaluation of School-to-Work Implementation, Mathematica Policy Research, Inc., conducted the first national survey of all STWOA-funded local STW partnerships. More than 90 percent of all partnerships--828 out of 906--responded to the survey.

This document presents an early look at aggregate findings from the first Local Partnership Survey (LPS). It presents the core set of questions the LPS was designed to address and a summary of corresponding survey data results. These data are based mainly on STW implementation in fall 1996 but also on some activity in the previous year, school year (SY) 1995-1996. Many partnerships had only recently formed and received STWOA grants when the survey was administered in fall 1996; others were just beginning to implement their STW initiatives.

Therefore, the first LPS can be viewed as a baseline against which future STW development will be measured. This summary simply documents those baseline statistics. An upcoming report will present a more-detailed analysis of the fall 1996 LPS, and later reports, based on surveys scheduled for fall 1997 and 1999, will examine the progress partnerships have made since those early beginnings. These future reports will

include, for example, in-depth examination of the patterns of STW implementation, as well as the characteristics of partnerships associated with these different practices (such as partnership size and poverty levels, and the timing and extent of funding).

**The School-to-Work
Opportunities Act
(STWOA)**

STWOA provides a framework and support for education reforms designed to help students move from school to productive careers. The legislation outlined the overall objectives of the reforms but provides considerable latitude to states and local partnerships to tailor STW systems to their own needs and constraints. STWOA specifies three key components as the foundations of STW implementation:

1. ***School-Based Learning.*** Rigorous classroom instruction linked to workplace experiences and that provides students with the information and skills needed to identify and prepare for promising careers
2. ***Work-Based Learning.*** Work experience, structured training, and other workplace activities appropriate to students' career interests and linked to their school curricula
3. ***Connecting Activities.*** Efforts undertaken by partnership members to help employers and schools forge and maintain links between the school-based and work-based components

Educators, employers, labor organizations, postsecondary institutions, and other groups are expected to collaborate at both the state and the local levels to develop STW systems with the following key features:

- C Career awareness, exploration, and counseling beginning no later than seventh grade
- C A career-focused program of study--“career major”--by 11th grade, designed to meet state academic standards (including those established under GOALS 2000) and the requirements for transitions to postsecondary education and the achievement of a skill certificate

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- C Curricula that integrate academic and vocational learning and incorporate broad instruction that, to the extent possible, exposes students to all aspects of an industry
 - C Linkages between secondary and postsecondary education and training
 - C A planned progression of work experience and training that is coordinated with school-based learning and that provides students with workplace mentoring and instruction in general workplace competencies
 - C Efforts to ensure all students equal access to the full range of school-based and work-based components

Federal funding to develop these elements into STW systems is intended to stimulate state and local partnership efforts but not to provide ongoing support. States can receive STWOA funding for no more than five years, and they are expected to award substate grants to local STW partnerships that include the requisite set of members. In summer 1994, federal grants totaling \$43 million were awarded on a competitive basis to eight states, and grants of about \$21 million were awarded directly to 44 local partnerships. In 1995, \$175 million more was awarded, including additional planning and implementation grants to the original 8 states and implementation funding for 19 additional states. These 27 states with implementation grants, combined with the local partnerships that received STWOA grants directly from federal agencies, are the basis for the first LPS.¹

¹In early December 1996, several months after the first LPS was initiated, further grants were made, including grants of almost \$59 million to 10 new states and continuing grants to the 27 states already funded. Along with grants provided directly to local partnerships, Native American partnerships, and U.S. territories, this brought total funding awarded to over \$643 million. Partnerships in the more-recently funded states will be included in the later rounds of the LPS.

**The National
Evaluation of School-
to-Work
Implementation**

STWOA requires the Secretaries of Education and Labor to conduct a national evaluation of the initiatives developed with the help of STWOA funding. In September 1995, a contract for a five-year evaluation was awarded to Mathematica Policy Research, Inc., and its subcontractors, MPR Associates and Decision Information Resources, Inc.

The evaluation has four objectives:

1. Assess states' progress in creating coherent STW systems
2. Identify promising practices for and possible barriers to the development of STW systems
3. Describe partnership roles, including the extent and nature of participation by employers, schools, postsecondary institutions, and other groups
4. Measure student participation and key transitions

To address these objectives, the evaluation includes three main components for documenting the changes that occur as STW implementation advances:

1. ***Local Partnership Survey (LPS).*** This survey, to be conducted in fall 1996, 1997, and 1999, will document the characteristics and development of STW partnerships, the roles of partnership members, and the aggregate levels of student participation in key STW activities.
2. ***In-Depth Case Studies.*** Site visits in 1996, 1997, and 1999 documenting how state and local partnership models have been planned, designed, and implemented in eight states (Florida, Kentucky, Maryland, Massachusetts, Michigan, Ohio, Oregon, and Wisconsin) and in six local partnerships located in other states that have received direct federal grants.
3. ***Study of Student Experiences.*** Surveys of three cohorts of 12th-grade students (spring 1996, 1998, and 2000) in the same eight states will examine their experiences in high school, including their access to and participation in key STW components. High school transcripts will be used to

describe the courses students take and which student subgroups participate most heavily in particular STW activities. Follow-up surveys will examine students' progress in postsecondary education, training, and employment.

A series of annual reports will synthesize information obtained from these evaluation components. The first annual report, "Partners in Progress: Early Steps in Creating School-to-Work Systems," integrates findings from the first round of visits to the in-depth study partnerships and the first survey of high school seniors.

The Local Partnership Survey (LPS)

The main features of the first LPS, conducted between October 1996 and March 1997, are as follows:

- © **Potential Respondents.** All local partnerships that were formed and had received a STWOA grant by July 1996 were included in the fall 1996 survey administration. Partnerships were treated as a single entity, even if they received multiple grants (e.g., a substate and a direct federal grant).
- © **Response Rate.** Out of the 906 partnerships identified, 828 returned completed questionnaires. The response rate was 92 percent in the 27 states with state STWOA implementation grants and 91 percent overall (including partnerships with direct federal grants in other states). Among partnerships that responded, approximately 50 percent were located in primarily rural areas, 36 percent in primarily suburban areas, and 14 percent in primarily urban areas.²
- © **Topics.** The questionnaire asks for information on (1) the organization of the local partnership; (2) career awareness and development; (3) efforts to promote access to STW activities; (4) school-based programs of study, including career majors, new curriculum approaches, student enterprises, and secondary-postsecondary linkages; (5) standards and certification; (6) employer and labor involvement in

²See Appendix B for a discussion of how the metropolitan status of partnerships was determined.

STW initiatives; (7) student workplace experiences; and (8) demographic characteristics and outcomes for students in “intensive STW activities.”³

- C **Focus.** To limit the burden on partnership coordinators, the LPS collects information primarily about secondary school activity. This emphasis mirrors that of STWOA; many of the components specified in the legislation are intended for high school implementation. “Secondary schools” in the LPS include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. Some information is collected about STW components in alternative education and postsecondary programs, however.

The fall 1996 LPS documents early STW planning and implementation. Most items that collect information on student participation refer to numbers of students involved in specific activities during SY 1995-1996. Items that seek information on the status of implementation efforts refer to “current” status at the time the questionnaire was completed in late fall 1996. These periods represent, in many of the surveyed partnerships, efforts in place prior to their receipt of STWOA grants. In other partnerships, the fall 1996 survey data depict the beginnings of grant-funded STW system implementation. Therefore, this first LPS should be viewed less as a description of the early impact of STWOA funding and more as a foundation for assessing future development of STW systems.

Purpose and Organization of this Summary Report

This brief report is intended to provide a snapshot of aggregate LPS results. It is structured to document the overall key findings on implementation and to allow state STW directors to measure state status and progress against those of the nation. The discussion and data in this report are based on tables presented in Appendix A.⁴

The remainder of this report presents the survey data results by topic: (1) partnership composition and governing boards, (2) career awareness and

³“Intensive STW activities” are defined as participation during the school year in an extended job or internship connected to a chosen career major or pathway.

⁴The same set of tables was prepared for all state STW directors but included only partnerships in their own state.

development activities, (3) efforts to promote access to STW systems, (4) definition and prevalence of career majors, (5) curriculum integration strategies, (6) secondary-postsecondary linkages, (7) new standards and certification, (8) business and labor support, (9) work-based learning opportunities, and (10) characteristics and outcomes of seniors in intensive STW activities. The tables appropriate to each topic are referenced in the margins.⁵

PARTNERSHIP COMPOSITION AND GOVERNING ENTITIES

Table 1
Table 2

STWOA stresses the importance of establishing a broad collaborative organization and process to develop STW systems. The emphasis on partnerships reflects a belief that cooperation among schools, employers, secondary and postsecondary institutions, labor, and community groups will allow students access to the full range of school-based and work-based components called for in the legislation and promote their transitions to higher education and future careers. Although the legislation does not require them to do so, many partnerships choose to formalize this cooperation through governing boards or councils that set policy and oversee STW planning and implementation.

Partnerships and their boards take a variety of forms. The LPS asked partnership coordinators to identify the number and types of entities included as partnership members and to specify which single entity is responsible for partnership leadership and/or fiscal matters. The LPS also collects information about the establishment of and representation on partnership governing boards. The data provide information on three main issues:

What types of institutions/organizations are involved in STW partnerships, and to what extent?

- C *Secondary educational institutions are most often counted as members of STW partnerships.* Virtually all partnerships (98 percent) include at least one local school district and one high school. Middle schools are represented in 747 partnerships (90 percent). Other types of entities--training institutions, business, industry, and labor groups, and

⁵Appendix B describes how key measures in the tables were computed.

community-based organizations--are less-frequently considered partnership members.

- C *STW partnerships cover a substantial share of all U.S. schools.* More than 5,000 school districts are involved in STWOA-funded partnerships. If districts are not included in more than one partnership, these figures suggest that STW reforms could reach close to one-third of all U.S. school districts. Similarly, the more than 6,000 high schools represent about 40 percent of all those in the United States.
- C *Two-year postsecondary institutions are more likely to be included as STW partners than are four-year institutions.* More partnerships involve community or technical colleges (745, or 90 percent) than baccalaureate-degree granting colleges and universities (475, or 57 percent). The total number of postsecondary partners reported is quite large--1,161 two-year and 922 four-year institutions. This computed total is likely to include significant double-counting, however. Colleges often work with multiple school districts and partnerships on STW activities and may therefore be counted as members of more than one partnership.
- C *Alternative education providers are represented in most partnerships.* Almost 70 percent (575) of partnerships reported counting as members organizations or institutions that offer GED or alternative diploma programs (including "second chance" programs) for high school age or older youths. These programs could be offered by community-based organizations, colleges, high schools, correctional facilities or other entities as part of dropout prevention strategies targeted to students currently in school or as efforts to encourage re-entry for out-of-school youth.
- C *Business and industry are considered members of many, but not all, STW partnerships.* About 82 percent of partnerships (682) include at least one private-sector firm as a partner, and 75 percent (625) include Chambers of Commerce. Far fewer

partnerships include other business or trade associations. The total number of firms and associations reported is substantial but uneven across partnerships, reflecting the wide differences in how “membership” is defined.

How are STW governing boards structured?

- Ⓒ *The boards or councils that oversee STW are quite large.* More than 80 percent of partnerships have such boards. Overall, partnerships have an average of about 28 board members. Among partnerships with governing boards or councils, the number of board members varies, however, with some partnerships reporting fewer than 5 and others more than 100.
- Ⓒ *Educators are better represented on governing boards than are employers.* Somewhat higher numbers and proportions of partnerships include school-related staff than private-sector staff on their boards. Across the partnerships in the survey, about 8,700 STW board members are educators, while close to 6,000 members represent individual employers and business associations (including Chambers of Commerce). Although some states have encouraged STW partnerships to form boards in which at least 51 percent of the members are employers, only about 6 percent of partnerships currently have employers as a majority of their board members.

Who plays leadership roles in STW reforms?

- Ⓒ *Educational institutions are considered most influential in designing, developing, and coordinating partnership-wide activities.* STW partnerships include various types of entities, and in some partnerships (about 28 percent) the entities work so collaboratively that local coordinators are unable or unwilling to identify a single organization as leading the STW effort. However, partnerships most often (35 percent) attribute leadership to local school districts, and another 8 percent and 5 percent report that an individual high school or area/regional vocational center, respectively, plays that role. Postsecondary institutions are considered the lead organization in about 6 percent of all partnerships.

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- C *Schools also have financial responsibility for partnership funds.* Eighty-five percent of all partnerships reported that an educational institution of some kind functions as the fiscal agent for the partnership, with the task of overseeing at least the STWOA grants. Local school districts are by far most likely to be designated as a partnership's fiscal agent (53 percent).
- C *Employers often lead policymaking councils.* If chairing a governing board reflects some leverage and influence on STW development activities, then the private sector plays a lead role in almost as many partnerships (about 30 percent) as do secondary school staff (about 37 percent).

CAREER AWARENESS AND DEVELOPMENT ACTIVITIES

Table 3
Table 4

STWOA identifies career development as an important way to help students explore career interests, identify career goals, and choose courses and other experiences that prepare them to meet those goals. The legislation promotes career awareness and career exploration and counseling for all students, beginning no later than seventh grade.

Partnerships adopt diverse approaches to providing these activities, including (1) offering separate career development or work readiness courses, (2) using academic or vocational class time to cover units on careers, (3) requiring students to develop educational plans specifying high school and postsecondary courses relevant to their career goals, (4) encouraging students to take career interest and aptitude assessments, and (5) scheduling time for students to research careers in school-based career centers. The LPS asks partnerships to record the number of secondary schools, postsecondary institutions, and alternative education providers that were implementing these strategies during the 1996-1997 school year. The data provide information on the following issues:

How consistently are career development activities implemented across partnership members?

- Ⓒ *Most STW partnerships and their schools routinely offer some kind of career development opportunities to secondary students. Almost 90 percent of all partnerships--and about 60 percent of all partnership schools--have students complete career interest inventories. Similar proportions of partnerships and schools set aside some academic or vocational class time for career development activities, perhaps including these interest inventories. Most partnerships offer more than one type of career development activity across their member schools.*
- Ⓒ *Within partnerships, career development activities are not always implemented consistently across schools. For example, about three-quarters of the partnerships reported offering separate career awareness classes, but only 37 percent of partnership schools are known to make these classes routinely available. In many partnerships, a relatively small proportion of schools offer any particular career development activity on a regular basis.*

What are the most common methods for delivering career development services?

- Ⓒ *Using regular class time for special units or lessons on careers is the most popular approach to providing career development. Nearly 60 percent of all partnership secondary schools--comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students--have adopted this method. More than a third of all partnership postsecondary institutions also use this approach.*
- Ⓒ *Many partners also give students opportunities to complete career interest inventories to help them begin to identify a career direction. About 60 percent of all secondary schools make these interest assessments available, as do more than a quarter of all postsecondary institutions.*

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- C *Alternative education providers emphasize the same activities as do secondary schools.* Although a smaller proportion of partnership alternative education providers reported on career development activities, those that did were more likely to include these activities as part of class time (37 percent) and to use career interest inventories (35 percent) than to offer other strategies.

Does availability of these services differ across rural, suburban, and urban partnerships?

- C *Schools in urban partnerships are somewhat more likely to offer career development activities than those in partnerships in other locales.* A higher proportion of schools in urban than in rural or suburban partnerships are implementing most types of activity, although the difference between urban and rural schools is not substantial. For example, 44 percent of secondary schools in urban partnerships offer separate career awareness classes, compared to 42 percent and 32 percent of schools in rural and suburban partnerships, respectively. In general, suburban partnerships provide career development services in a smaller proportion of their schools than do urban and rural partnerships.

PROMOTING ACCESS TO SCHOOL-TO-WORK

Table 5

Achieving the objective of large-scale participation means ensuring that youth who face particular barriers to successful careers are not excluded from the school-based and work-based opportunities the STW partnerships are developing. The legislation stipulates that partnerships provide all students with equal access to the full range of STW activities.

Partnerships and their member schools are encouraged to identify appropriate ways to facilitate participation for special populations, including students with disabilities, at-risk and out-of-school youth, and students in special education. Partnerships may undertake strategies that affect all or some of their member schools, or individual schools may be charged with fulfilling this mandate on their own. The LPS included a question to determine which specific types of strategies partnerships and their schools have adopted to promote access to STW systems. Coordinators' responses address several issues:

To what extent do partnerships use special strategies to encourage STW involvement by special population groups?

- C *Substantial numbers of partnerships report taking steps to facilitate participation for members of special population groups.* In close to 80 percent of all partnerships, either individual schools or the partnerships themselves are working to implement special services or accommodations to increase student access to STW activities.
- C *Most partnerships rely on individual schools to decide on and adopt particular strategies.* In relatively high proportions of partnerships, schools on their own institute specific measures to improve access to STW. Substantially fewer partnerships have explicitly taken steps at the partnership level to promote the participation of students from special populations.

What kinds of strategies do they use?

- C *It is relatively common for partnerships to devote STW resources to promoting access to STW components.* For example, nearly half of all partnerships report using some grant funds for special services, accommodations, or activities intended to increase participation by economically or educationally disadvantaged students. A similar proportion allocate grant resources to improve access for students with disabilities. Other partnership-level strategies are less prevalent.
- C *Schools in most partnerships provide special career guidance and/or tutoring for special populations.* These are the services most likely to be available in at least some schools in a partnership. Between one-half and three-quarters of all partnerships offered career guidance or tutoring to students from different special population groups. The survey data do not indicate, however, how many schools in the partnerships actually offer these services.

Which special population groups receive the most attention?

- C *Strategies most often target students with disabilities and those who are economically or educationally disadvantaged.* Higher proportions of partnerships reported taking steps to ensure participation of these groups than any other special population groups. Both partnership-level and school-level strategies are concentrated on students with disabilities and those at risk of academic failure. This emphasis probably reflects, in part, the greater number of students in these groups.
- C *Particular strategies favor different groups.* For example, targeted promotional materials are used most frequently to encourage students with nontraditional occupational interests to participate in STW activities (61 percent of partnerships). Regularly scheduled progress evaluations are common to help pregnant and parenting students participate and remain involved in school-based and/or work-based components.

CAREER MAJORS

Table 6
Table 7

STWOA encourages schools to offer students rigorous, career-focused programs of study. As envisioned in the legislation, all students would, no later than 11th grade, identify a broad area of career interest and follow a career major--a related coherent sequence of courses that prepares them for eventual entry into the chosen field. These programs of study are expected to link together academic and occupational instruction and work-based learning and to lead to postsecondary education or training as appropriate.

Career majors are a relatively new way of organizing course selection for all students. Programs with the features of career majors already exist in many schools--such as some youth apprenticeship, Tech-Prep, and career-academy programs--but they serve small numbers of students. Some partnerships and their members are expanding career major options by building on these earlier initiatives.

Defining and implementing career majors can be challenging, depending on how the programs of study are structured. Some partnerships and schools cluster students with the same major in a few key classes to enhance the career focus of the curriculum. Some schools are choosing

to offer defined career majors gradually, making only one or two available for students interested in those particular fields.

The LPS collects information on the prevalence and definition of career majors. Partnership coordinators were asked to report the number of their schools implementing career majors with different characteristics. Without regard to definition, the coordinators were also asked to document the number of schools offering career majors in different industry categories and the number of SY 1996-1997 12th-grade students participating in each category. These data respond to several important questions about career majors:

To what extent are career-focused programs of study available in partnerships and their schools?

- C *Most partnerships report offering career majors.* More than 70 percent of all partnerships make career majors, by some definition, available in at least one of their member schools.
- C *A subset of partnership schools are implementing them so far.* At least one career major is currently available in about half of all partnership schools. The career-focused programs of study reported by these schools reflect varying definitions of career majors.
- C *Career-focused programs of study are somewhat less prevalent in rural areas.* Rural partnerships are less likely to offer career majors (65 percent) than are partnerships in other locales (78 percent), and they do so in a slightly smaller proportion of their schools (43 percent versus close to 50 percent). This pattern probably reflects the greater difficulty small (rural) schools have in tailoring curricula and course offerings to particular career areas.

How are these career majors defined?

- C *A substantial portion of career-focused programs of study are defined in written course sequences.* Many partnership schools practice what could be called a very modest form of “career major”; counselors first ask students to express a career interest, and then recommend appropriate electives. Most partnerships and schools that offer career majors, even

of this modest type, report documenting the courses relevant to particular career options and distributing written course sequences to guidance staff. About 47 percent of all partnership schools offer career majors; 41 percent of all partnership schools report using lists of recommended courses as the basis for career interest or major course selections.

- C *The career major concept often includes grouping some students by career interest.* Some partnership schools try to “cluster” students who choose the same career area/program of study in a few key courses. In about 21 percent of partnership schools, at least one career program is offered in which participants are grouped in some classes (for example, an existing youth apprenticeship program). Schoolwide career clustering is much less prevalent (about 13 percent of partnership schools). In these schools, all students are expected to choose a broad career focus for their studies and are grouped with similarly interested students in some academic and occupational courses. Not surprisingly, rural schools, which tend to be smaller and offer fewer courses than suburban or urban schools, are less likely to group students by career interest area.
- C *In about half the schools that offer them, career majors cover “all aspects of the industry” to some degree.* STWOA encourages partnerships to adopt a broad approach to career preparation, emphasizing “all aspects of an industry” rather than focusing on narrowly defined occupational skills training. At this early stage in STW development, however, programs of study that provide instruction on multiple issues and occupational pathways related to a career area are not yet common. Fewer than one-quarter of all partnership schools--just under half of those that make career majors available--report covering all aspects of the industry in their career major curricula.
- C *About one-quarter of partnership schools currently offer a career major that includes a workplace component.* Coordinators report that just over half of all partnerships, and about one-quarter of partnership schools, have at least some

students in a clustered program of study in which participation in a career-related internship or paid job is a routine part of the program.

In what industry areas are career majors offered and students participating?

- C *Career majors are most prevalent in Business and Engineering/Industrial Technology.* Just over 60 percent of partnerships and about a third of all partnership schools offer some type of program of study in these two broad career areas. Career pathway programs in Agriculture/Natural Resources are least common.
- C *More than 10 percent of seniors in partnership schools already select some type of career-focused program of study.* Partnership coordinators report that more than 142,000 12th-graders in SY 1996-1997 chose a career major at some point during high school. These students--who undoubtedly participated in very different types of career programs--represented slightly more than 10 percent of all 12th-graders in partnership schools.
- C *Some schools cannot so far report counts of students in career majors.* The report of 142,676 seniors in career majors underestimates participation somewhat. Although 47 percent of partnership schools offer career majors, only about 38 percent of schools (more than 80 percent of those that have career majors) were able to document the number of students involved.

CURRICULUM INTEGRATION STRATEGIES

Table 8

STWOA encourages local partnerships to integrate academic and vocational instruction and to link school-based and work-based learning. The impetus for these efforts is a belief that bringing more relevant applications into academic learning and more academic rigor to occupational and work-based learning will better engage students' interest and intellect and help them reach higher levels of achievement.

The same motives were evident in earlier initiatives that also emphasized curriculum integration reforms, including the 1990 Amendments to the Carl D. Perkins Vocational Act and its Title IIIIE provisions regarding Tech-Prep. Many STW partnerships are continuing or expanding integration efforts begun under these other initiatives.

Strategies to link academic and occupational learning are quite diverse. Some partnerships and schools encourage approaches that assist individual teachers or groups of teachers in developing and implementing new curriculum units. These approaches include encouraging team teaching, providing common planning periods for teachers involved in the same career major, and adopting block scheduling of courses to allow for the longer class periods considered desirable for applied and project-based learning. The sources of integrated curricula also vary; some are purchased from commercial vendors, and some are developed by individual teachers.

The particular strategies partnerships and their schools use depend on their local needs and constraints. The LPS asked partnership coordinators to record how many of their secondary schools and postsecondary institutions were implementing each of 11 curriculum integration approaches that had been observed as part of field research. The data suggest the following responses:

Which curriculum integration strategies do partnership schools emphasize?

- C *Use of applied academic curricula is common.* At the secondary level, about half of all partnership schools use applied academic curricula developed by vendors (46 percent of schools) or by teachers in individual schools (54 percent). More than 20 and 30 percent of STW postsecondary partners also use commercial and school-developed applied curricula, respectively. This particular approach focuses on teaching academic classes by involving students in hands-on applications of theoretical concepts, using examples from careers, industries, or the world of work more generally.
- C *Many, but not all, schools have incorporated all aspects of the industry into their vocational curricula.* Coordinators report that a substantial proportion of secondary (42 percent) and postsecondary schools (30 percent) have broadened vocational-technical instruction to emphasize the diverse set

of issues and occupational pathways related to the particular industry or career focus (including financial, management, technology, and environmental roles and responsibilities). A smaller proportion of schools have adopted this broad career exposure approach in academic courses--37 percent and 26 percent in secondary and postsecondary institutions, respectively.

- C *Few schools provide common planning periods for teachers to develop new curricula.* Only 14 percent of all partnership secondary schools set aside time during the school day for teachers involved in the same career area or major to work together on new curricula. These schools represent less than one-third of all schools implementing career majors.
- C *Schools in suburban partnerships are less likely to adopt most curriculum integration approaches.* With only a few exceptions, suburban partnerships reported that somewhat smaller proportions of both their secondary schools and their postsecondary institutions were implementing curriculum integration strategies.

How frequently is curriculum developed jointly--with input from multiple partnership members?

- C *About a quarter of partnership secondary schools and a quarter of postsecondary institutions report working with their counterparts on curriculum integration.* Collaboration between high school and college faculty is relatively common, to revise or develop new course units and materials for use at either or both levels. Such cooperation is probably the continuation of earlier Tech-Prep efforts to link secondary and postsecondary programs.
- C *Employers often collaborate with educators on new curricula.* Coordinators report that in 30 percent of secondary schools and a similar proportion of postsecondary schools, faculty work together with employer representatives to revise or develop new course units or materials for use in school classrooms or at work sites.

SECONDARY-POSTSECONDARY LINKAGES

Table 10

STWOA recognizes the importance of helping students pursue postsecondary education and increasing the number of students who do so. The legislation identifies “effective linkages between secondary and postsecondary education” as a requirement of all STW system initiatives.

Which specific types of linkages are created is left to partnerships to decide. Articulation agreements between high schools and community colleges are in place in many localities, the result of Tech-Prep or even earlier initiatives. These agreements are intended to facilitate students’ transition from secondary to postsecondary institutions by eliminating redundancies in course work and providing opportunities to earn college credit or advanced standing for skills acquired in high school.

High schools and postsecondary institutions collaborate in other ways as well. For the LPS, partnership coordinators reported on the number of their members adopting each of nine different strategies. Their responses provide answers to several questions:

What types of strategies do partnerships use to link secondary and postsecondary education?

- C *Articulation agreements are by far the most common arrangements.* More than half of all partnership secondary schools, as well as 40 percent of postsecondary partners, have developed agreements that allow either for the granting of college credit or advanced standing for secondary school course work or for dual enrollment.
- C *A significant share of postsecondary institutions report granting credit for high school work-based learning.* Partnership coordinators report that about 20 percent of postsecondary partners have agreements with high schools to allow students to receive postsecondary credit for secondary work-based learning. This figure is surprisingly high at this early stage of STW development; it may partly reflect collaboration between high schools and registered apprentice-ship programs, which have traditionally treated hours at a work site as formal learning.

-
- C *Sharing labor market and employer information is a frequent form of institutional linkage.* More than 40 percent of all partnership secondary schools, and more than 35 percent of all postsecondary partners, communicate with their counterparts about labor market information or employer contacts.

Do strategies differ across rural, suburban, and urban partnerships?

- C *Postsecondary institutions seem to be most active in rural partnerships.* Higher proportions of rural postsecondary partners have implemented strategies that encourage collaboration with their secondary counterparts, relative to suburban or urban postsecondary partners. For example, about 43 percent of colleges in rural partnerships share labor market information with their high schools, while only 35 percent and 38 percent of colleges in suburban and urban partnerships do so.
- C *Suburban partnerships are least likely to develop secondary-postsecondary linkages.* With few exceptions, smaller proportions of suburban partnership high schools and colleges develop joint agreements and share information.

STANDARDS AND CERTIFICATION

Table 11
Table 12
Table 13

STW systems are expected to align with or lead efforts to raise academic and technical skill standards. States and local partnerships are required to coordinate STW implementation with initiatives to develop and implement challenging academic standards under the Goals 2000: Educate America Act. State and local partnerships are also encouraged to upgrade technical skill instruction and promote the use of industry-based skill standards and portable skill certificates.

The LPS collects information about new graduation requirements and certification practices in STW partnerships. These data address two key issues:

To what extent are changes in high school graduation requirements occurring alongside STW reforms?

- Ⓒ *Many partnership schools are increasing academic requirements.* Nearly half of all partnerships report that since July 1994, at least one member school district has increased the number of academic credits required for high school graduation. These changes are adopted in only some districts, however; 20 percent of all partnership school districts have raised academic credit requirements. Changes in academic graduation requirements include increasing (1) the number of semesters of math required (37 percent of all partnerships, 14 percent of all partnership districts), (2) the level of math required for graduation (34 percent of all partnerships, 13 percent of all districts), and (3) the number of semesters of science required (31 percent of all partnerships, 11 percent of all districts).
- Ⓒ *Adoption of proficiency testing will affect students in STW partnership schools.* As many states and school districts move toward testing students on basic academic skills, some are making the passage of these tests a requirement for high school graduation. Coordinators reported that about 20 percent of STWOA-funded partnerships and 9 percent of all partnership districts recently made changes that will involve students in this form of assessment.
- Ⓒ *New career- or work-based graduation requirements are being introduced, but less often than new academic requirements.* About 20 to 30 percent of partnerships report that at least some of their member districts have established requirements for selection of a career major, community service, technology education, or career development in the last two years. Not surprisingly, however, districts are giving more emphasis to academic requirements. Most of the recent career/work-based changes are so far implemented in a smaller proportion of partnership districts (between 5 and 9 percent of all partnership districts) than those implementing new math and science requirements. One exception regards completion of a portfolio; nearly 30 percent of partnerships and 12 percent of all partnership districts introduced this new graduation requirement, making it about as prevalent as increases in math requirements.

How commonly are skill certificates awarded?

- C *About a third of partnerships awarded technical skills certificates.* In SY 1995-1996, just over 35 percent of all partnerships gave certificates to at least some students, denoting mastery of industry-specific skills identified by industry groups at the partnership-wide, regional, state, or national level. However, only 13 percent of partnership schools were definitely reported as awarding these credentials that year. The proportion of schools is low in part because SY 1995-1996 was early in the funding cycle for many partnerships, but also because many partnership coordinators were unable to determine whether some of their member schools use such certificates.
- C *Certificates documenting general workplace readiness skills are less common.* The legislation emphasizes the importance of providing students with “instruction in general workplace competencies, including instruction and activities related to developing positive work attitudes, and employability and participative skills.” However, credentials that certify student acquisition of these skills are less frequently awarded by partnerships (12 percent) than are technical skill certificates (35 percent). Only about 3 percent of partnership secondary schools were reported to have awarded workplace readiness certificates in SY 1995-1996.
- C *Relatively few students received skill certificates last year.* Partnership coordinators recorded a small number of seniors as receiving technical and general workplace readiness skill credentials in SY 1995-1996. Combined, these students with skill certificates represent about 3 percent of all seniors in partnership schools. The vast majority of technical skill certificates were awarded to seniors completing career preparation programs in the business and engineering/industrial technology areas. These counts are low estimates, however, because only about three-quarters of the schools reportedly awarding certificates could report how many students had received them.

BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS

Table 14
Table 15

Creating central roles for employers and labor groups in STW systems is an important goal at the federal, state, and local levels. The involvement of these groups is expected to open opportunities for students to participate in work-based learning experiences, to offer new approaches and resources to address school reform challenges, and to strengthen ties between STW and broader workforce development strategies.

The idea of partnerships between schools and employers long preceded STWOA. However, the legislation and its funding has helped to stimulate, broaden, and formalize employer and labor collaboration with educators.

Firms, unions, and business/trade associations collaborate with schools in a variety of capacities beyond that of providing students workplace experiences. The LPS listed eight major categories of support that business and labor can provide to schools and asked coordinators to record (1) whether any partnership schools received each type of support, (2) how many schools did so, (3) the number of employers providing the support, and (4) the number of labor unions and other groups providing the support. The data provide responses to the following issues:

To what extent do business and labor work with schools directly?

- C *In most partnerships, at least a few firms, unions, and schools collaborate on STW activities.* Virtually all partnerships reported that member schools received some kind of support from employers and/or unions in SY 1995-1996.
- C *Employer and union assistance is provided unevenly across partnership schools.* Although high proportions of partnerships report having private-sector support for schools, only a subset of their member schools receive it. For example, although in 88 percent of partnerships employers and/or unions released staff to speak in classrooms or participate in career days, they did so in only 53 percent of partnership schools in SY 1995-1996. Many schools in partnerships that report forms of employer/union support do not yet have the benefit of this collaboration.
- C *Schools usually get support from multiple employers.* Most schools that receive assistance from business have several partners. Schools that could report the number of employers

providing support had, on average, 4 to 12 firms working with them in SY 1995-1996 on various activities that involved school staff. In contrast, relatively few union representatives are so far collaborating with schools.

- C *Urban partnerships are most likely to receive support.* Higher proportions of urban partnerships received assistance from business and industry, and they did so in a wider variety of ways. Despite the relative scarcity of employers and unions in rural areas, STW partnerships in these communities seem to get almost as much help from the private sector as do suburban partnerships.

What are the most common types of support business and labor provide?

- C *Guest speaking at schools is most prevalent.* Employers and sometimes unions, continue to help schools with traditional activities, such as guest speaking in classrooms or assemblies, and participating in career education days and other school events. More than 88 percent of partnerships and 53 percent of partnership secondary schools had employers involved in this way in SY 1995-1996.
- C *Firms already provide training or internships for staff from many schools.* Even as early as SY 1995-1996, employers supported staff development activities for counselors and teachers through workplace visits and internships. The reported number of employers participating in this activity is relatively small (16,175). However, their contribution involved a substantial proportion of partnerships (77 percent) and partnership schools (41 percent).
- C *Employers and unions are more likely to work with school staff than provide material resources.* Activities such as STW promotion, guest speaking, and staff training involved employers and unions with more than three-quarters of all partnerships and about 40 percent of partnership schools. In contrast, business and labor offered equipment, office space, and student or teacher awards to a much smaller proportion of partnerships and schools.

WORK-BASED LEARNING ACTIVITIES

Table 9
Table 16
Table 17
Table 18

STW proponents view work-based learning as essential to helping students prepare for careers. Work-based activities are intended to expose students to careers they might want to enter, motivate them to succeed in education, and help them apply and develop skills.

STWOA recognizes a variety of work-based learning activities as appropriate for students' development. Job shadowing, school-sponsored (student) enterprises, on-the-job training, and basic work experience or internships of different durations each provide particular learning opportunities. However, the legislation emphasizes the benefits of an extended (preferably paid) program of training and work experience that is linked to students' career majors and that provides instruction related to all aspects of the industry in which students work.

Many STW partnerships have focused on recruiting employers and arranging different types of work-based learning activities. To assess the extent of these activities, the LPS asked coordinators to report for SY 1995-1996 the number of their secondary schools offering each of several types of workplace opportunities, the number of students participating, and the number of employers providing each type of opportunity. Coordinators also documented the characteristics of and participation in student enterprises. These usually "school-based enterprises" (SBEs) are defined as businesses students operate to produce goods and services and market them to the school community or the general public. The LPS data on work-based learning provide information on the following issues:

What kinds of school-based student enterprises are there, and who participates?

- C *Many partnerships and schools offer student enterprises of some type.* About two-thirds of all partnerships and one-third of all partnership secondary schools implement these activities. Rural partnerships are least likely to have student enterprises, even though this form of work-based learning is often presumed to substitute for workplace learning where employer partners are scarce.
- C *Task rotation and linkage to course grades are common features.* In almost 60 percent all partnerships (and 22 percent of schools), participants in at least some student enterprises experience all aspects of the operation by rotating tasks and responsibilities. In a similar proportion of

partnerships and schools, students' contribution to and performance in the enterprise affect their class grade. These particular characteristics of student enterprises are available in almost three-quarters of the schools that offer student enterprises.

- C *Most student enterprises are run without local business support.* Local businesses sponsor or guide student enterprise activities in about 15 percent of all partnerships schools, or less than half of all schools that offer these ventures.
- C *Partnerships seem to define school-based enterprises broadly, and to count many students as participants.* Schools that reported SBE participants had, on average, 64 students involved in these activities; in many partnerships the average number of participants per school was as high as 200. These counts suggest that most schools have moved beyond the traditional interpretations of SBEs. A school store, bank, stationery graphics production company, and web-site development company are all common in STW partnerships schools, but site observations suggest that each typically involves no more than 20 students. The large numbers of SBE participants reported suggest that some schools may include short-term, large-scale projects like a "senior bake sale" in their definition of school-based enterprises.
- C *Student enterprises involve more than just vocational students.* Participants in SBEs are most often drawn from occupational-technical programs, as has been the long-standing practice of these activities; 20 percent of all partnership schools offer at least one SBE in which vocational students are the primary recruits. However, it is common for schools to draw students from academic courses (11 percent of partnership schools) or the general student body (11 percent of schools). In more than 5 percent of partnership schools (about 15 percent of those implementing SBEs), the enterprises involve special-education students or students with disabilities.

To what extent are activities at work sites available and students participating in them?

- C *Most partnerships offer some type of workplace experience for students, but in only a subset of their schools.* For example, more than 80 percent of partnerships reported that job shadow experiences or visits to work sites were available. However, these activities were offered in only about half of all partnership schools.
- C *So far, lower-intensity activities are most common.* Short-duration, unpaid experiences that are not related to students' choice of a career major are more often available than other types of activities. For example, work site visits/job shadowing and community service activities are available in a higher proportion of partnership schools (49 percent and 29 percent, respectively) than are paid jobs (28 percent) and unpaid internships (25 percent) during the school year that are linked to students' career programs. Even in schools that can report the number of participants, there are more students involved in the lower-intensity activities. During SY 1995-1996, schools offering community service had an average of 39 students participating, while schools offering career major-related, paid, after-school jobs involved an average of closer to 25 students.
- C *Workplace activities are somewhat less prevalent in rural partnerships.* Perhaps because relatively few employers are located in rural communities, smaller proportions of rural partnerships make workplace experiences available for students. Even among schools that do provide these experiences and can document how many students participate, those in rural partnerships involve fewer students, on average, than schools in urban or suburban partnerships. The smaller number of students participating is probably a reflection of the smaller school size and lower population density in these areas. However, suburban partnerships, which generally include a substantial employer base, are only slightly more likely than rural partnerships to offer workplace activities. Schools in urban partnerships are most likely not only to provide these activities, but also to involve the most students, on average.
- C *Relatively few partnerships currently organize workplace activities for students in alternative education.* About two-

thirds of all partnerships report alternative education providers as members. However, relatively few partnerships (just over 25 percent of all partnerships) reported STW workplace activity arranged by such providers. Where partnerships did document the workplace experiences of students in alternative education, they indicated that the distribution of these experiences was similar to that of students in comprehensive and vocational high schools--less-intensive activities were most common.

CHARACTERISTICS AND OUTCOMES OF STUDENTS IN INTENSIVE STW ACTIVITIES

Table 19
Table 20

One goal of STWOA and its leading proponents is to make it possible for large numbers of students from diverse backgrounds to have coherently related STW experiences that help them prepare for successful careers. That objective makes it important to examine who participates in STW components, how the size and composition of this group changes over time, and the extent to which the group progresses to postsecondary education and employment as STW systems develop.

LPS coordinators were asked to document the characteristics and outcomes of a specific group of students engaged in STW activities--12th-graders who participated during the school year in an extended job or internship connected to their choice of a career major. This group, termed "participants in intensive STW activities," was selected for the focus of data collection because it represents the highest-level goals of STW system implementation. Moreover, it would not be feasible to collect postsecondary data on all or most students, including those who might have been only slightly involved in STW activities. Coordinators' reports contained several findings:

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- C *Seniors in intensive STW activities are generally representative of all students in their partnerships' districts.* The racial/ethnic distribution of intensive STW participants in SY 1995-1996 was generally similar to that of the overall student population in the schools of partnerships that could report on student characteristics. However, students in intensive STW activities were less likely to be Hispanic.
- C *Intensive participants are generally similar to U.S. students overall in other characteristics.* Partnership coordinators reported other demographic characteristics for their students that are roughly consistent with estimates for the overall student population in the United States (National Assessment of Vocational Education 1994). However, intensive STW participants may be slightly less likely to be at risk than other U.S. students; less than 2 percent of intensive participants are limited English proficient (LEP), and about 22 percent are classified as economically or educationally disadvantaged, while 4 to 5 percent of all U.S. students are LEP, and closer to one-third are disadvantaged.
- C *Most partnerships and schools cannot yet report on student outcomes.* Although 43 percent partnerships can document the number of seniors in intensive STW activities, significantly fewer can report how many graduated from high school (32 percent) or made transitions to jobs (15 percent) or postsecondary education (20 percent). The proportion of schools that can report on these outcomes is much smaller. Thus, calculation of rates of transition to college or employment are premature.

REFERENCES

- Hershey, Alan M., Paula Hudis, Marsha Silverberg, and Joshua Haimson. "Partners in Progress: Early Steps in Creating School-to-Work Systems." Report submitted to the U.S. Department of Education. Princeton, NJ: Mathematica Policy Research, Inc., April 1997.
- National Assessment of Vocational Education. "Interim Report to Congress." Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, January 1994.

APPENDIX A

FALL 1996 LPS DATA TABLES

TABLE 1: PARTNERSHIP SIZE AND COMPOSITION IN FALL/WINTER 1996

Type of Institution/Entity ^a	Number of Partnerships with Each Entity	Number of Each Entity		Percent of Partnerships with Entity as	
		Total	Average Per Partnership	Lead Organization	Fiscal Agent
Education Institutions					
Local Education Agencies/Districts	826	5,122	6.2	35.1%	53.1%
High Schools	822	6,375	7.7	7.6%	6.2%
Middle Schools	747	6,001	7.2	0.0%	0.0%
Elementary Schools	719	16,849	20.3	0.0%	0.0%
Vocational High Schools	207	407	0.5	1.6%	1.7%
Area/Regional Vocational Districts/Centers	261	392	0.5	5.2%	6.8%
Intermediate or Regional Educational Service Districts	282	375	0.5	3.3%	6.9%
Two-Year Postsecondary Institutions	745	1,161	1.4	5.4%	9.2%
Four-Year Postsecondary Institutions	475	922	1.1	0.6%	0.8%
Alternative Education Providers	575	1,548	1.9	0.1%	0.2%
Other Educational Institutions	166	310	0.4	0.7%	0.5%
Training Institutions					
Proprietary Training Institutions	134	284	0.3	0.0%	0.0%
Registered Apprenticeship Agencies	242	484	0.6	0.0%	0.0%
JTPA/PIC Agencies	585	665	0.8	1.8%	3.9%
Other Training Institutions	140	268	0.3	0.0%	0.0%
Business and Labor					
Private-Sector Firms	682	13,480	16.3	0.7%	0.4%
Business/Industry or Trade Associations	431	1,717	2.1	0.5%	0.1%
Chambers of Commerce	625	1,325	1.6	2.4%	1.6%
Labor Unions	502	1,015	1.2	0.0%	0.0%
Other Organizations					
Workforce Development Boards	410	489	0.6	2.7%	1.7%
Local/Regional/State Government Agencies	653	2,863	3.5	0.5%	2.2%
Community-Based Organizations/Other Nonprofit	511	1,835	2.2	2.4%	2.3%
Parent/Student Representation	475	NA	NA	NA	NA
Other	476	476	0.6	0.6%	0.7%
No Single Lead Organization/Fiscal Agent Not Reported				28.4%	1.8%

SOURCE: STW Local Partnership Survey, fall 1996.

^aMay include some double-counting across partnerships.

NA = Not Applicable.

NOTE: Secondary schools include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 2: REPRESENTATION ON GOVERNING BOARDS IN SY 1996-1997

Types of Members on Governing Board	Number of Partnerships with Each Type	Percent of Partnerships with Chairperson from Each Member Type ^a	Number of Each Member Type	
			Total	Average Per Partnership
Secondary School Districts				
LEA/Vocational District Administrators	628	21.4%	2,529	3.1
Individual School Administrators	446	6.6%	1,438	1.7
Academic Faculty	387	3.6%	1,456	1.8
Vocational Faculty	348	3.7%	903	1.1
Counselors	400	1.9%	854	1.0
Postsecondary Institutions				
Administrators	506	6.5%	963	1.2
Faculty	256	1.1%	432	0.5
Counselors	101	0.2%	134	0.2
Training Institutions				
Proprietary Training Institutions	62	0.1%	74	0.1
Registered Apprenticeship Agencies	123	0.2%	165	0.2
JTPA/PIC Agencies	380	1.9%	494	0.6
Business and Labor				
Private-Sector Firms	583	21.7%	4,452	5.4
Business Associations/Chambers of Commerce	497	7.7%	1,325	1.6
Labor Unions	365	1.2%	557	0.7
Other Organizations				
Alternative Education Providers	244	0.6%	343	0.4
Workforce Development Boards	248	2.2%	494	0.6
Local/Regional/State Government Agencies	474	3.4%	1,380	1.7
Community-Based Organizations/Other Nonprofit	328	2.1%	918	1.1
Parents	315	1.1%	NA	NA
Students	282	0.6%	NA	NA
Other	521	3.7%	3,937	4.8
No Governing Board/Chairperson Not Reported	145	24.2%		
Average Number of Board Members Overall	27.6			
Percentage of Partnerships with Employer Representatives as Majority of Board Members	6.3%			

SOURCE: STW Local Partnership Survey, fall 1996.

^aMay sum to more than 100 percent because partnerships often have more multiple chairpersons.

NA = Not Applicable.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 3: CAREER AWARENESS AND DEVELOPMENT ACTIVITIES IN SY 1996-1997

	Activity Reported as Routinely Available in:					
	Secondary Schools		Postsecondary Institutions		Alternative Education Providers	
	Total Number	Percent of Secondary Schools	Total Number	Percent of Postsecondary Institutions	Total Number	Percent of Alternative Education Providers
Total Number of Institutions in Partnerships	7,174	100.0%	2,083	100.0%	1,548	100.0%
Total Number of Institutions Reporting on Career Awareness and Development Activities	5,199	72.5%	955	45.8%	790	51.0%
By Type of Approach/Activity:						
<i>Separate Career Awareness/Development Classes</i>	2,648	36.9%	572	27.5%	494	31.9%
<i>Separate Work Readiness Classes</i>	2,040	28.4%	439	21.1%	434	28.0%
<i>Activities Integrated into Academic/Vocational Classes</i>	4,235	59.0%	730	35.0%	574	37.1%
<i>Development of Individual Student Plans</i>	3,166	44.1%	NA	NA	474	30.6%
<i>Career Interest Inventories</i>	4,254	59.3%	564	27.1%	538	34.8%
<i>Scheduled Use of Career Centers</i>	2,542	35.4%	549	26.4%	291	18.8%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

**TABLE 4: CAREER AWARENESS AND DEVELOPMENT ACTIVITY IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
<i>Separate Career Awareness/Development Classes</i>	73.7%	41.6%	74.8%	31.7%	79.3%	44.4%	74.9%	36.9%
<i>Separate Work Readiness Classes</i>	62.0%	29.4%	70.8%	25.9%	73.3%	35.2%	66.8%	28.4%
<i>Activities Integrated into Academic/Vocational Classes . .</i>	87.6%	61.8%	89.7%	57.4%	84.5%	58.4%	87.9%	59.0%
<i>Development of Individual Student Course Plans</i>	73.2%	46.1%	77.4%	41.8%	70.7%	47.9%	74.4%	44.1%
<i>Career Interest Inventories</i>	88.6%	63.4%	89.4%	56.1%	82.8%	60.9%	88.0%	59.3%
<i>Scheduled Use of Career Centers</i>	59.9%	33.0%	73.8%	35.8%	67.2%	39.6%	65.9%	35.4%

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 5: PROMOTING ACCESS TO SCHOOL-TO-WORK IN SY 1996-1997

Strategy	Percent of Partnerships Using Each Strategy for Specified Special Population Groups							
	Minority Students	Limited English Proficiency (LEP) Students	Students With Disabilities	Economically or Educationally Disadvantaged Students	Pregnant or Parenting Students	Out-of-School Youth	Males or Females With Regard to Non-Traditional Occupations	Academically Gifted/Talented Students
Partnership-Level Strategies								
<i>Representatives <u>required</u> on partnership governing board</i>	26.9%	16.8%	37.6%	35.3%	20.2%	28.4%	29.5%	21.3%
<i>Partnership grant funds used for special services, accommodations, or activities . .</i>	34.1%	27.8%	44.9%	46.3%	30.7%	36.2%	38.3%	29.0%
<i>Training for business community on working with special populations</i>	21.1%	15.9%	34.7%	29.5%	18.2%	21.4%	24.9%	17.8%
School-Level Strategies								
<i>Materials/instruction in students' native (non-English) language</i>	NA	42.4%	NA	NA	NA	NA	NA	NA
<i>Culturally specific curriculum materials . .</i>	38.5%	35.1%	NA	NA	NA	NA	52.3%	NA
<i>Interpreters</i>	NA	43.4%	56.3%	NA	NA	NA	NA	NA
<i>Targeted promotional materials</i>	48.1%	36.0%	56.5%	57.5%	49.5%	42.1%	61.8%	47.7%
<i>Special career guidance</i>	56.9%	49.8%	77.3%	71.7%	67.4%	56.9%	68.0%	61.0%
<i>Special tutoring</i>	50.1%	56.4%	74.2%	67.8%	59.9%	45.2%	46.0%	46.4%
<i>Regularly scheduled progress evaluations</i>	50.6%	49.6%	74.0%	66.4%	56.3%	41.7%	51.3%	54.3%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 6: DEFINITION AND PREVALENCE OF CAREER MAJORS IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Career Majors in Use (All Definitions)	64.5%	43.4%	77.7%	48.4%	77.6%	50.3%	71.1%	46.9%
Characteristics of Career Majors								
<i>Written Course Sequence</i>	62.5%	36.1%	75.7%	42.0%	74.1%	45.5%	69.0%	40.5%
<i>Some Students Grouped by Career Area</i>	40.6%	18.3%	53.5%	20.6%	47.4%	26.6%	46.3%	20.7%
<i>All Students Grouped by Career Area</i>	18.7%	11.8%	29.6%	13.6%	35.3%	11.5%	25.0%	12.7%
<i>Instruction Provided on Issues and Pathways Related to Career Area</i>	44.0%	20.1%	59.1%	23.8%	58.6%	28.1%	51.6%	23.2%
<i>Extended Workplace Activity Required</i>	46.2%	20.1%	64.8%	26.8%	64.7%	28.3%	55.6%	24.7%

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 7: INDUSTRY EMPHASIS OF CAREER MAJORS IN SY 1996-1997

Career Major Categories	Percent of Partnerships with Career Major in Specified Category ^a	Percent of Secondary Schools with Career Major in Specified Category	12th-Graders Selecting Career Major in Specified Category	
			Total Number	As Percentage of All 12th-Graders in Partnership Schools
<i>Agriculture/Natural Resources</i>	48.2%	20.2%	9,516	0.7%
<i>Arts/Communications/Humanities</i>	51.2%	23.1%	18,820	1.4%
<i>Business/Marketing/Finance</i>	62.6%	34.6%	42,731	3.1%
<i>Engineering/Industrial Technology</i>	62.0%	30.4%	31,886	2.3%
<i>Health</i>	55.9%	26.3%	17,638	1.3%
<i>Human Services</i>	49.9%	23.6%	22,085	1.6%
Percent of Secondary Schools Able to Provide Counts of Students Selecting Career Majors				
		37.6%		

SOURCE: STW Local Partnership Survey, fall 1996 and NCES Common Core Database, 1994.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 8: CURRICULUM INTEGRATION STRATEGIES IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Strategy	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions
<i>Commercial Applied Academic Packages</i>	48.8%	26.9%	43.0%	18.8%	47.5%	23.2%	45.6%	22.5%
<i>School-Developed Applied Units/Projects</i>	54.6%	33.9%	52.2%	30.1%	56.3%	29.6%	53.6%	31.4%
<i>State-Developed Applied Curricula</i>	32.5%	15.3%	28.3%	11.4%	29.1%	13.3%	29.8%	13.2%
<i>"All Aspects of the Industry" in Vocational Courses</i>	41.9%	35.0%	41.5%	28.5%	45.6%	26.4%	42.2%	30.4%
<i>"All Aspects of the Industry" in Academic Courses</i>	36.8%	30.0%	33.5%	23.1%	43.6%	24.0%	36.1%	25.7%
<i>Academic-Vocational Team Teaching</i>	21.8%	14.1%	22.0%	10.0%	22.5%	11.2%	22.0%	11.7%
<i>Teacher Group Collaboration on Career-Related Curriculum Units</i>	23.3%	NA	27.1%	NA	34.9%	NA	26.9%	NA
<i>Common Teacher Planning Period for Teachers in Same Major/Pathway</i>	12.1%	NA	14.2%	NA	20.1%	NA	14.4%	NA
<i>Block Scheduling</i>	26.1%	NA	24.0%	NA	30.5%	NA	25.6%	NA
<i>Secondary/College Faculty Collaboration on New or Revised Curricula</i>	22.6%	29.5%	25.2%	25.3%	31.3%	24.8%	25.2%	26.7%
<i>Faculty/Employer Joint Development of Curricula for Classrooms or Worksites</i>	25.9%	33.5%	30.7%	29.6%	37.2%	27.2%	30.0%	30.6%

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: Secondary schools include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 9: STUDENT ENTERPRISES: CHARACTERISTICS AND PARTICIPATION IN SY 1995-1996
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Features of Student Enterprises	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Student Enterprises in Operation (All Types)	60.3%	30.3%	72.4%	31.5%	72.4%	35.3%	66.4%	31.6%
Majority Participation by Student Group from:								
<i>Specific Occupational Program(s)</i>	47.9%	19.0%	62.8%	19.7%	62.1%	24.2%	55.3%	20.1%
<i>Specific Academic Course(s)</i>	34.1%	11.6%	40.5%	10.4%	39.7%	14.7%	37.2%	11.4%
<i>Special Education or Students with Disabilities</i>	18.2%	4.5%	30.9%	5.8%	27.6%	6.5%	24.2%	5.5%
<i>Career Interest Club(s)</i>	24.8%	7.9%	37.9%	7.6%	34.5%	9.9%	30.9%	8.1%
<i>General Student Body</i>	34.3%	11.7%	39.2%	10.8%	36.2%	12.0%	36.4%	11.3%
Features of Student Enterprises:								
<i>Participants Experience All Aspects of Operation</i>	53.8%	22.3%	63.1%	21.6%	62.9%	24.4%	58.5%	22.2%
<i>Participation Affects Class Grade</i>	54.3%	22.4%	60.1%	20.3%	62.9%	23.3%	57.6%	21.4%
<i>Local Businesses Provide Support</i>	37.7%	12.9%	54.2%	16.0%	55.2%	18.5%	46.1%	15.3%
<i>Participants Receive Wages/Share of Profits</i>	30.2%	8.4%	30.6%	6.2%	31.9%	8.4%	30.6%	7.2%
Percent of Secondary Schools That Can Provide Counts of Student Enterprise Participants SY 1995-1996		20.4%		18.9%		19.5%		19.5%
Total Number of Students Participating in Student Enterprises SY 1995-1996		21,803		53,570		14,186		89,559
Average Number of Students Per Partnership School Reporting Counts, SY 1995-1996		43.9		76.5		70.9		64.1

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 10: SECONDARY-POSTSECONDARY LINKAGES IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Linkage	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools
<i>Share Labor Market Information</i>	41.0%	43.3%	41.4%	34.6%	50.7%	38.1%	42.6%	38.4%
<i>Share Employer Networks/Contacts</i>	38.8%	38.3%	42.7%	33.3%	44.6%	34.4%	41.7%	35.3%
<i>Joint Advisory Committees</i>	33.3%	37.8%	31.1%	29.1%	36.4%	29.9%	32.6%	32.4%
<i>Share Equipment</i>	22.1%	32.3%	16.9%	20.2%	18.5%	24.3%	18.9%	25.3%
<i>Joint Staff Development</i>	30.8%	33.5%	34.2%	24.9%	37.2%	29.1%	33.5%	28.8%
<i>Common Cooperative Education Standards</i>	26.5%	21.7%	28.8%	17.3%	37.7%	20.5%	29.3%	19.4%
<i>Agreements Allowing Dual Enrollment</i>	50.9%	48.8%	49.1%	37.6%	53.9%	38.7%	50.4%	41.8%
<i>Articulation Agreement Granting College Credit or Advanced Standing for Secondary School Coursework</i>	52.5%	53.6%	53.3%	42.4%	57.5%	43.5%	53.6%	46.6%
<i>Articulation Agreements Granting College Credit for High School Work-Based Learning</i>	NA	23.9%	NA	25.2%	NA	13.9%	NA	20.7%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 11: CHANGES IN GRADUATION REQUIREMENTS SINCE JULY 1994

New Requirements	Percent of Partnerships	Percent of All Partnership Districts
Academic Requirements		
<i>Increased Number of Academic Credits Required</i>	48.7%	20.3%
<i>Increased Number of Semesters/Quarters of Math Required</i>	36.5%	13.7%
<i>Increased Level of Math Required</i>	34.4%	12.9%
<i>Increased Number of Semesters/Quarters of Science Required</i>	30.8%	11.0%
<i>Increased Number of Semesters/Quarters of English Required</i>	14.1%	4.4%
<i>Increased Number of Semesters/Quarters of Social Studies Required</i>	21.5%	7.3%
<i>Increased Number of Semesters/Quarters of Foreign Language Required</i>	10.9%	3.1%
<i>Requirement to Pass Basic Proficiency Exam</i>	19.8%	9.1%
<i>Requirement to Earn a Certificate of Initial Mastery</i>	5.9%	1.2%
<i>Elimination of Separate Diploma Requirements for College-Bound and Other Students</i>	9.1%	3.9%
<i>Introduction of Exam-Based Diploma</i>	5.0%	2.4%
Career/Work-Based Requirements		
<i>Requirement That Students Select a Career Major</i>	20.9%	7.0%
<i>Community Service Requirement</i>	19.4%	5.0%
<i>Technology Education or Vocational Requirement</i>	30.0%	9.2%
<i>Required Career Development Course</i>	23.1%	6.5%
<i>Required Work-Readiness Course</i>	16.2%	4.3%
<i>Requirement That Students Complete a Portfolio</i>	30.2%	12.0%

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: Secondary schools include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 12: TECHNICAL SKILL AND WORKPLACE READINESS CERTIFICATES IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Industry-Specific Skill Certificates Awarded in SY 1995-1996				
<i>Percent of Partnerships Awarding Skill Certificates</i>	25.8%	49.2%	32.8%	35.3%
<i>Percent of Secondary Schools Awarding Skill Certificates</i>	9.4%	16.5%	8.3%	12.9%
<i>Percent of Secondary Schools Recording Certification on Student Transcripts</i>	3.8%	4.4%	1.7%	3.8%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Skill Certificates</i>	7.2%	10.1%	5.8%	8.5%
Seniors Who Received Skill Certificates in SY 1995-1996				
<i>Total Number</i>	5,098	23,970	4,296	33,364
<i>As a Percent of All Seniors in Partnership Schools</i>	2.5%	3.4%	0.9%	2.4%
Workplace Readiness Certificates Awarded in SY 1995-96				
<i>Percent of Partnerships Awarding Workplace Readiness Certificates</i>	10.5%	15.3%	11.2%	12.3%
<i>Percent of Secondary Schools Awarding Workplace Readiness Certificates</i>	2.3%	2.9%	3.0%	2.7%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Workplace Readiness Certificates</i>	2.0%	2.5%	2.5%	2.4%
Seniors Who Received Workplace Readiness Certificates in SY 1995-1996				
<i>Total Number</i>	1,865	5,497	2,024	9,386
<i>As a Percent of All Seniors in Partnership Schools</i>	0.9%	0.8%	0.4%	0.7%

SOURCE: STW Local Partnership Survey, fall 1996 and NCES Common Core Database, 1994.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 13: INDUSTRY EMPHASIS OF TECHNICAL SKILL CERTIFICATES IN SY 1995-1996

Career Area	Percent Awarded Skill Certificates		Number of 12th-Graders Received Skill Certificates	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Students Receiving
<i>Agriculture/Natural Resources</i>	13.2%	2.7%	1,385	2.3
<i>Arts/Communication/Humanities</i>	12.7%	3.0%	2,680	4.4
<i>Business/Marketing/Finance</i>	24.3%	8.0%	10,083	16.6
<i>Engineering/Industrial Technology</i>	24.5%	7.5%	10,068	16.6
<i>Health</i>	22.1%	6.3%	4,413	7.3
<i>Human Services</i>	17.6%	4.9%	4,371	7.2

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 14: BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1995-1996

Type of Support Provided by Business/Labor	Percent Received Support		Number of Employers Provided Support		Number of Labor Unions Provided Support	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Supporting Employers	Total	Average Per School Reporting Counts of Supporting Unions
Working With School Staff						
<i>Curriculum Development</i>	65.8%	30.7%	19,038	4.7	691	0.2
<i>Promotion/Marketing STW</i>	78.6%	38.6%	24,841	6.2	859	0.2
<i>Training/Internships for School Staff</i>	76.9%	40.9%	16,175	4.0	512	0.1
<i>Guest Speaking at Schools</i>	88.0%	53.2%	49,025	12.2	1,246	0.3
Providing Material Resources						
<i>Provide Equipment</i>	70.0%	29.0%	7,551	1.9	282	0.1
<i>Loan Office Space</i>	53.1%	20.8%	7,260	1.8	400	0.1
<i>Provide Student Awards</i>	67.5%	30.0%	9,159	2.3	887	0.2
<i>Provide Teacher Stipends</i>	33.1%	11.3%	1,702	0.4	53	0.0
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions		56.1%				

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 15: BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Support Provided by Business/Labor	Percent of Secondary Schools Received Support In:			
	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Working with School Staff				
<i>Curriculum Development</i>	24.8%	32.6%	38.2%	30.7%
<i>Promotion/Marketing STW</i>	39.3%	37.5%	41.2%	38.6%
<i>Training/Internships for School Staff</i>	39.2%	41.7%	41.7%	40.9%
<i>Guest Speakers at Schools</i>	52.8%	53.5%	53.6%	53.2%
Providing Material Resources				
<i>Provide Equipment</i>	28.5%	28.3%	32.5%	29.0%
<i>Loan Office Space</i>	18.6%	21.5%	23.1%	20.8%
<i>Provide Student Awards</i>	29.6%	28.7%	35.6%	30.0%
<i>Provide Teacher Stipends</i>	7.2%	12.9%	14.7%	11.3%
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions	57.9%	55.5%	53.8%	56.1%

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 16: WORKPLACE ACTIVITY: AVAILABILITY AND STUDENT PARTICIPATION IN SY 1995-1996

Type of Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Secondary Schools	Total Number	Average Per School Reporting Counts of Students Participating	Total Number	Average Per School Reporting Counts of Students Participating
Related to Chosen Career Major/Pathway						
<i>Paid Jobs During School Year</i>	56.6%	28.4%	71,320	25.2	28,354	10.0
<i>Unpaid Internships/Jobs During School Year</i>	55.0%	24.5%	51,599	18.2	14,102	5.0
<i>Paid Summer Jobs</i>	45.4%	18.5%	23,264	8.2	8,456	3.0
<i>Unpaid Summer Internships/Jobs</i>	23.2%	6.9%	2,200	0.8	1,733	0.6
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	83.1%	48.8%	209,619	74.0	42,331	15.0
<i>Community Service/Volunteer Work</i>	65.9%	29.2%	110,347	39.0	11,956	4.2
<i>Workplace Experience Not Related to Career Major</i>	56.2%	23.7%	69,662	24.6	13,257	4.7
<i>Assignment to a Workplace Mentor</i>	50.4%	18.1%	53,030	18.7	11,364	4.0
Percent of Secondary Schools Able to Provide Counts of Students Participating in Workplace Activities						
		39.5%				

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 17: AVAILABILITY OF WORKPLACE ACTIVITY IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Workplace Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Average Number of Students Per School Reporting Counts	Percent of Secondary Schools	Average Number of Students Per School Reporting Counts	Percent of Secondary Schools	Average Number of Students Per School Reporting Counts	Percent of Secondary Schools	Average Number of Students Per School Reporting Counts
Related to Career Major								
<i>Paid Jobs During School Year</i>	25.4%	20.1	28.8%	25.2	34.4%	40.3	28.4%	25.2
<i>Unpaid Internships/Jobs During School Year . .</i>	22.5%	8.8	24.5%	24.7	29.4%	22.1	24.5%	18.2
<i>Paid Summer Jobs</i>	17.3%	6.9	16.6%	6.1	28.4%	20.2	18.5%	8.2
<i>Unpaid Summer Internships/Jobs</i>	5.9%	0.4	5.4%	0.8	14.9%	1.8	6.9%	0.8
Not Necessarily Related to Career Major								
<i>Worksite Visits/Job Shadowing</i>	47.8%	58.6	49.7%	87.5	48.2%	69.7	48.8%	74.0
<i>Community Service/Volunteer Work</i>	23.5%	28.3	30.9%	42.2	36.8%	58.8	29.2%	39.0
<i>Workplace Experience Not Related to Career Major</i>	23.4%	20.0	22.1%	24.2	30.5%	39.6	23.7%	24.6
<i>Workplace Mentor</i>	14.4%	4.6	17.5%	31.9	28.9%	11.6	18.1%	18.7

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 18: WORKPLACE ACTIVITY ARRANGED BY ALTERNATIVE EDUCATION PROVIDERS:
AVAILABILITY AND PARTICIPATION IN SY 1995-1996**

Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Alternative Education Providers	Total Number	Average Number Per Provider Reporting Counts of Students Participating	Total Number	Average Number Per Provider Reporting Counts of Students Participating
Related to Chosen Career Major						
<i>Paid Jobs During School Year</i>	16.4%	2.9%	3,536	9.8	1,827	5.1
<i>Unpaid Internships/Jobs During School Year</i>	15.5%	2.6%	3,762	10.5	1,614	4.5
<i>Paid Summer Jobs</i>	12.3%	2.1%	2,822	7.9	1,335	3.7
<i>Unpaid Summer Internships/Jobs</i>	5.6%	1.0%	370	1.0	418	1.2
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	25.7%	4.8%	8,164	22.7	3,496	9.7
<i>Community Service/Volunteer Work</i>	20.0%	3.6%	5,576	15.5	1,579	4.4
<i>Workplace Experience Not Related to Career Major</i>	17.5%	3.4%	6,975	19.4	3,204	8.9
<i>Assignment to a Workplace Mentor</i>	12.2%	2.1%	2,666	7.4	1,152	3.2
Percent of Alternative Education Providers Able to Provide Counts of Students Participating in Workplace Activities		5.0%				

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 19: CHARACTERISTICS OF SY 1995-1996 SENIORS IN INTENSIVE STW ACTIVITIES^a

Student Characteristics	12th-Graders in Intensive STW Activities	All Secondary Students in Partnerships Reporting on Intensive STW Participation
Total Number of 12th-Graders	65,291	707,472
Race/Ethnicity (Percent of Total)		
White	70.2%	69.1%
Black	17.2%	14.9%
Hispanic	5.9%	11.2%
Native American/Alaskan Native	1.1%	1.0%
Asian/Pacific Islander	3.8%	3.9%
Unknown	1.8%	
Other Characteristics (Percent of Total)		
Female	45.7%	NA
Limited English Proficiency	1.8%	NA
Students with Disabilities	9.5%	NA
Economically/Educationally Disadvantaged	22.0%	NA
Academically Gifted and Talented	4.7%	NA
Percent of Partnerships Able to Report Student Characteristics	43.0%	

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Available.

^aIntensive STW activities include paid or unpaid jobs/internships held during the school year that are related to a student's chosen career major.

NOTE: Secondary schools include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 20: OUTCOMES FOR SY 1995-1996 PARTICIPANTS IN INTENSIVE STW ACTIVITIES

	Percent Reporting Outcomes		Number of Students Reported	
	Partnerships	Secondary Schools	Total	Average Per Reporting School
Number of 12th-Grade Students in Intensive STW Activities	48.9%	31.3%	65,291	17.2
Student Outcomes^a				
<i>Graduated from High School in 1996</i>	32.4%	13.6%	29,801	7.8
<i>Entered Employment After High School Related to Career Major</i>	14.7%	4.4%	5,508	1.4
<i>Entered Postsecondary Education/Training:</i>	20.4%	6.1%	9,563	2.5
<i>Four-Year College</i>	17.8%		3,699	
<i>Two-Year College</i>	19.0%		3,724	
<i>Vocational Training</i>	10.0%		811	
<i>Proprietary School</i>	5.1%		333	
<i>Registered Apprenticeship</i>	5.3%		309	
<i>Armed Forces</i>	13.2%		687	

SOURCE: STW Local Partnership Survey, fall 1996.

^aRates of transition (for example, graduation rates, postsecondary enrollment rate) cannot be computed from the figures in this table because particular outcomes may be reported for varying numbers of partnership schools.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

APPENDIX B

EXPLANATION OF KEY COMPUTATIONS

The system-building measures included in the tables were computed using all partnerships that responded to the survey and all their member schools as a base or denominator. In other words, the “Percent of Secondary Schools” implementing a particular STW component is equal to the number of secondary schools that, according to partnership coordinators’ response, make the component available, divided by the total number of secondary schools in all partnerships.

In many cases, partnership coordinators did not know the number of secondary schools implementing particular features. Such a response potentially undercounts the extent of implementation, so the computed statistics are lower-bound estimates of the proportion of partnership schools engaged in each activity.

Many of the summary tables show statistics computed separately for rural, suburban, and urban partnerships. This analytic perspective was chosen because access to STW initiatives is an important issue to many state agencies and to federal policymakers.

Urbanicity was determined on the basis of the standard Metropolitan Statistical Area (MSA) code classifications available in the National Center for Education Statistics’ (NCES) Common Core Data. Each secondary district in the NCES database has a designated metropolitan status based on the MSA codes. In partnerships with multiple districts, we derived an “average urbanicity code” by weighting each district’s metropolitan status code by its total secondary enrollment. Thus, a partnership that contains a large central city (urban) school district and two much smaller suburban districts would likely be given a code of “urban,” because the number of students in the urban district significantly outnumbered the number of students in the two smaller suburban districts. This classification strategy can yield some imprecision, however, for partnerships with secondary districts that span urban, suburban, and rural areas.